

Curriculum Development

Design and Engineering Program Enhancement - Trenton School District

The College of New Jersey
NJ Higher Education Sector: State College or University

CONTACT INFORMATION

David Cipolloni
The College of New Jersey
PO Box 7718, Ewing, NJ
Telephone: 609.989.2489

DESCRIPTION

TCNJ's Center for Design, Engineering & Technology is collaborating with the Hamilton School System to design and implement a new technology education program that will (1) improve student performance in the core curriculum standards for mathematics, science and technology, and (2) enhance student knowledge and skills that will be essential for living and working in a progressively more complex world. The program builds upon the efforts and results of the UPDATE (Upgrading Practice through Design and Technology "Engineering" Education) and Children Designing and Engineering (CD&E) projects previously funded by the National Science Foundation. Additionally, the program links directly to the products and results of the High-Tech Workforce Excellence Grant awarded to TCNJ by the New Jersey Commission on Higher Education.

- Program activities included:
- Developing curriculum units and providing teacher training for a new ninth grade "Introduction to Design and Technology" course
 - Providing summer workshops for participating teachers to prepare them to teach the "Introduction to Design and Technology" course
 - Supporting the redesign of existing courses within the Science and Engineering Academy at Trenton Central High School

Technology Education Program Redesign

The College of New Jersey
NJ Higher Education Sector: State College or University

CONTACT INFORMATION

David Cipolloni
The College of New Jersey
PO Box 7718, Ewing, NJ
Telephone: 609.989.2489

Partners: Hamilton Township Board of Education, Philadelphia School District

DESCRIPTION

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NJDOE Inclusion Grant

Felician College
NJ Higher Education Sector: Independent College or University
Participants Served: 6 school districts

CONTACT INFORMATION

Dr. Donna Barron, Dean, Division of Teacher Education
Felician College
Lodi, NJ
Telephone: 201.559.3549
Email: barrond@felician.edu

Partners: Wood-Ridge, Piscataway, Newark, Lyndhurst, Rockaway, and Hackensack

DESCRIPTION

Redesign special education program using representatives form LEA's

Curriculum Development

Professional Development Program

New Jersey Institute of Technology
NJ Higher Education Sector: Public Research University
Year Began: 1996 Participants Served: 120 - 150

CONTACT INFORMATION

Dr. Howard Kimmel, Professor of Chemical Engineering & Executive Director, Center for Pre-College Programs
New Jersey Institute of Technology
Newark, NJ
Telephone: 973.596.3574
Fax: 973.596.4641
Email: kimmel@adm.njit.edu
Web Site: <http://www.njit.edu/precollege>
Partners: NJIT, NPS

DESCRIPTION

The purpose of this program is to provide workshops that will improve and enhance teachers’ skills and knowledge in preparing standards-based lessons that will help their students achieve the skills and knowledge defined by the NJ Core Curriculum Content Standards; and to improve and enhance teachers’ skills and knowledge to help their students understand and use the tools of measurement important in the study of science and engineering. The program provides professional development workshops during the summer and academic year.

Rutgers/LEAP Initiative

Rutgers, The State University of New Jersey - Camden
NJ Higher Education Sector: Public Research University
Year Began: 1993 Participants Served: 750 students + 500 plus families

CONTACT INFORMATION

Dr. Gloria Bonilla-Santiago/Wanda Garcia, Faculty Director & PI/ Program Director
Rutgers University-Camden
321 Cooper Street, Camden, NJ 08102
Telephone: 856.225.6348
Fax: 856.225.6500
Email: gloriabs@camden.rutgers.edu wandag@camden.rutgers.edu
Web Site: <http://www.camden.rutgers.edu/Camden/CFSUCL>
Partners: LEAP Academy University Charter School, Rutgers University-Camden, Delaware River Port Authority, Robert Wood Johnson Foundation, Geraldine Dodge Foundation

DESCRIPTION

The Rutgers/LEAP Initiative is a multi-million dollar effort which encompasses the LEAP Academy University Charter School, serving 750 children in grades Pre-K-12th, and the Rutgers School-Based Centers of Excellence. It represents a comprehensive outreach effort of Rutgers-Camden to enhance opportunities for the children and families of Camden through the integration of education, health and human service programs, and community development. LEAP offers expanded learning opportunities, including an extended day/year-round instructional program; comprehensive health services; ongoing professional development opportunities for teachers and staff; and extensive parent involvement. The partnership provides Pre-K through 12th-grade instruction and curriculum development, academic-year precollege programming, summer health services, year-round legal services, and ongoing evaluation and research.

Edison Across the Curriculum

Rutgers, The State University of New Jersey
NJ Higher Education Sector: Public Research University
Year Began: 2004

CONTACT INFORMATION

Paul Israel / Theresa M. Collins, Research Professor; Director and Editor, Thomas A. Edison Papers / Associate Research Professor; Associate Director, Thomas A. Edison Papers
Rutgers, The State University of New Jersey
44 Road 3, Piscataway, NJ 08854-8049
Telephone: 732.445.8511
Web Site: <http://edison.rutgers.edu>
Partners: IEEE Foundation, Martinson Family Foundation, Rutgers Math and Science Learning Center, Rutgers Center for Mathematics, Science and Computer Education

DESCRIPTION

The program aims to enhance the educational experience of students, professionals, and the community, and improve understanding of vital concepts in technology and global society by integrating visual and textual knowledge from the Thomas A. Edison Papers into lesson plans, hands-on demonstrations, professional development workshops, and on-line resource guides that (1) support the implementation of standards-based curricula by teachers; (2) build assessable, modifiable resources to meet the curricula needs of all students; and (3) emphasize learning opportunities in K-12 education that are critical to mathematics, scientific and technological literacy.

Curriculum Development

English/Language Arts Curriculum Reform Project

Rutgers, The State University of New Jersey
NJ Higher Education Sector: Public Research University
Year Began: 2004 Participants Served: 120

CONTACT INFORMATION

Julie Cheville, Assistant Professor of Literacy Education, Director, National Writing Project at Rutgers University
Rutgers, The State University of New Jersey
Graduate School of Education, 10 Seminary Place, New Brunswick, NJ 08540
Telephone: 732.932.7496, x8121
Fax: 732.932.7552
Email: cheville@rci.rutgers.edu
Web Site: <http://www.nwprutgers.org>
Partners: Woodbridge Township Schools, Old Bridge High School (in contract)

DESCRIPTION

Teacher-Consultants who comprise the National Writing Project at Rutgers University have begun the second year of an in-service partnership with middle school English/Language Arts teachers employed in the Woodbridge Township Schools. As an in-service provider to NJ schools, the NWP at Rutgers arranges in-service series and other supplemental services that support the instructional needs of NJ teachers engaged in writing instruction. Our partnership with Woodbridge Township consists of an annual in-service package of full-day workshops that address the integration of reading and writing in the middle school grades.

The National Writing Project at Rutgers University provides a host of instructional services for departments, school, and districts. They include annual in-service workshops, support for curriculum reform, site-based Open Institutes during the summer months, off-campus courses in spring semesters, and other assistance by request.

Reading First - Linden Public Schools

Rutgers, The State University of New Jersey
NJ Higher Education Sector: Public Research University
Year Began: 2002 Participants Served: 65 teachers, 1625 children

CONTACT INFORMATION

Gail Fazio, Reading First Supervisor
Linden School District
Linden, NJ
Telephone: 908.468.2800 X 146
Email: gfazio@linden.k12.nj.us
Partners: Gail Fazio, Lesley Morrow

DESCRIPTION

Under the No Child Left Behind legislation, grants called Reading First are available for schools in need of improvement. New Jersey received a Reading First grant for which districts applied and received funding. Linden received funding to improve literacy achievement in grades K through 3. Rutgers University provides teachers professional development opportunities to enhance reading strategies in the classroom. Teachers attend professional development workshops in the summer and during the academic year.

Engineering Planet

Rutgers, The State University of New Jersey - Center for Advanced Infrastructure & Transportation
NJ Higher Education Sector: Public Research University
Year Began: 2002 Participants Served: 1473

CONTACT INFORMATION

Dr. Monica Mazurek, Assistant Professor
Rutgers University - Center for Advanced Infrastructure & Transportation/Civil & Environmental Engineering/School of Engineering
623 Bowser Road, Piscataway, NJ 08854
Telephone: 732.445.3673
Fax: 732.445.0577
Email: mmazurek@rci.rutgers.edu
Web Site: <http://www.cait.rutgers.edu>
Partners: School Districts and Schools, Middle School teachers, Statewide

DESCRIPTION

The Center has hired two science teachers from a local middle school to develop several educational modules. It is critical that the education of K-12 students include an understanding of the importance of transportation, energy use and forms of transportation, and how transportation is connected to many forms of environmental pollution; such as air quality, airborne particulate matter and ozone, and surface runoff containing road dust that ends up in surface waters and coastal and estuarine sediments. The goal of this program is to inform and educate K-12 students about Transportation Infrastructure, Civil and Environmental Engineering, and what professionals in these areas do.

Each lesson is related to the New Jersey state/national science and educational standards. Teachers are able to access the website and pull up any of the available lesson plans, knowing that each lesson will target many areas of the curriculum that they need to cover.

Curriculum Development

MetroMath

Rutgers, The State University of New Jersey - Center for Math, Science & Computer Education (CMSCE)

NJ Higher Education Sector: Public Research University

Year Began: 2003

CONTACT INFORMATION

Joseph Rosenstein, Principle Investigator
Rutgers University - CMSCE
118 Frelinghuysen Rd., Piscataway, NJ 08854
Telephone: 732.445.4065
Fax: 732.445.2894
Email: joer@dimacs.rutgers.edu
Web Site: <http://www.metromath.org>

Partners: University of Pennsylvania, City University of NY, Newark Public School District, Plainfield Public School District, NY City Public School System, Philadelphia School District

DESCRIPTION

Rutgers, The State University of New Jersey, is the lead recipient of up to \$10 million from the National Science Foundation (NSF) to conduct a five-year project focused on improving mathematics education in urban schools from kindergarten through 12th grade. Rutgers’ partners in the project are The City University of New York/Graduate Center and the University of Pennsylvania, as well as the school districts of New York City, Newark and Plainfield, N.J., and Philadelphia. MetroMath: The Center for Mathematics in American Cities is a diverse partnership of specialists in mathematics, mathematics education, cognitive science, psychology, educational policy, and urban studies. The MetroMath Center will identify the critical strategies that will help urban students succeed in mathematics, and how those strategies should be implemented. The Center will develop leaders who will work to implement those strategies, and will leverage existing resources in urban communities to help children learn. The MetroMath Center will develop a research-based framework for successful mathematics education in America’s cities.

MetroMath will offer two-year seminars and mentored internships for 50 graduate students and 100 working teachers, each of whom will earn a special certificate. These multi-disciplinary seminars will provide participants with a variety of perspectives and tools, and prepare them to assume major leadership positions in improving mathematics education in the cities. To prepare them for these graduate-level seminars, the Center will offer professional development programs to more than 300 teachers in New Jersey, New York City, and Philadelphia. The institutes aim at developing teachers’ knowledge of mathematics and their understanding of how it is learned and how it may best be taught.

GK-12 Fellows: Building a Learning Community in Science and Mathematics Through Educational Partnerships

Rutgers, The State University of New Jersey - Center for Mathematics, Science and Computer Education

NJ Higher Education Sector: Public Research University

Year Began: 1999

Participants Served: 32 participants directly: 8 graduate students, 4 undergraduate students and 20 middle school teachers (middle school students meet with teachers, graduate and undergraduate students on a weekly basis)

CONTACT INFORMATION

Dr. Kathleen Scott, Professor
Rutgers University Math and Science Learning Center
618 Allison Road, Piscataway, New Jersey 08854
Telephone: 732.445–2806
Fax: 732.445–0643
Email: scott@biology.rutgers.edu
Web Site: <http://mslc.rutgers.edu>

Partners: Edison Township School District, John Adams Middle School, Woodrow Wilson Middle School, Metuchen School District, Edgar Middle School, Old Bridge Township School District, Jonas Salk Middle School, Plainfield School District, Hubbard Middle School, South Plainfield School District, South Plainfield Middle School, South Brunswick Township School District, Crossroads Middle School South

DESCRIPTION

This Program establishes and supports dynamic learning environments among the university and local school districts. Rutgers University graduate and advanced undergraduate students in science, technology, engineering, or mathematics (STEM) partner with middle school teachers, their students, and administrators from selected NJ school districts. Together they enhance their school curricula with innovative, hands-on science and mathematics activities in areas that are targeted by the schools. Rutgers students and teachers begin to work together during a two-week Summer Institute. Partnerships are strengthened during the academic year, when students introduce contemporary science and mathematics to existing middle school programs.

This is a year long project that begins with a two week summer Institute when Rutgers graduate and undergraduate science, mathematics or engineering students meet with middle school science and mathematics teachers. During the academic year, Rutgers students work with students in the classrooms of their partner teachers, enhancing existing programs.

Curriculum Development

AP English Teachers Colloquium Series

Rutgers, The State University of New Jersey - Department of English

NJ Higher Education Sector: Public Research University

Year Began: 1999 Participants Served: approx. 50 per session

CONTACT INFORMATION

Richard Dienst, Associate Professor of English
Rutgers University, New Brunswick
510 George Street, New Brunswick, NJ 08901-1167
Telephone: 732.932.8082
Fax: 732.932.1150
Email: richard.dienst@rutgers.edu
Web Site: <http://english.rutgers.edu/>

Partners: AP English teachers statewide

DESCRIPTION

The Rutgers English Department organizes colloquia for AP English high school teachers across the state. Each colloquium features presentations from Rutgers English Faculty and focuses on a specific scholarly topic. Past events, for example, addressed topics such as "Early Modern Literature and Culture" and "Native American Literature." We hope to provide opportunities for sharing research and pedagogical strategies. Participants receive credit for 3 professional development hours. The colloquia are offered one or two times a year, led by 2 to 3 faculty members.

The Newark Student Voices Project

Rutgers, The State University of New Jersey - Eagleton Institute of Politics

NJ Higher Education Sector: Public Research University

Year Began: 2001 Participants Served: 1080 students per year

CONTACT INFORMATION

Susan Sherr, Assistant Research Professor
Eagleton Institute of Politics
191 Ryders Lane, New Brunswick, NJ 08901
Telephone: 732.932.9384 x268
Fax: 732.932.6778
Email: ssherr@rci.rutgers.edu
Web Site: <http://www.student-voices.org/newark>

Partners: Newark Public Schools, Annenberg Public Policy Center, Chad Science Academy, Eagleton Institute, Rutgers

DESCRIPTION

The goal of Newark Student Voices Project is to implement a civic education curriculum in all of Newark's public high schools. A full-time project coordinator works with Newark teachers to engage students in the political process and help them to make their voices heard in the community. Teachers are trained each year in how to use the curriculum effectively in the classroom. Services offered during the academic year include professional development, classroom visits to help students use the project web site, Sponsorship of district-wide civics fair and facilitation of classroom visits by public officials and activists

Curriculum Development

New Jersey Center for Character Education

Rutgers, The State University of New Jersey - Located in Graduate School for Applied and Professional Psychology, Center for Applied Psychology

NJ Higher Education Sector: Public Research University

Year Began: 2003 Participants Served: Ten public school districts and a network of 1,400 educators

CONTACT INFORMATION

Philip M. Brown, Ph.D, Director
Located in Graduate School for Applied and Professional Psychology, Center for Applied Psychology
41 Gordon Road, Piscataway 08854
Telephone: 732.445.7504
Fax: 732.445.7970
Email: pmbrown@rci.rutgers.edu
Web Site: <http://www.nj-charactered.net>

Partners: RU Department of Psychology (Dr. Maurice Elias), Character Education Partnership (national, non-profit), Center for Civic and Law-Related Education (RU), Collaborative for Academic, Social and Emotional Learning (national, non-profit), Princeton Center for Leadership Training (national, non-profit), The College of New Jersey, School of Education, Center for Effective School Practices (RU), Network for Family Life Education, Center for Applied Psychology (RU), The Center for Media Studies (RU), Farleigh Dickinson University, Cape May County Special Svs. School District, Cherry Hill Public Schools, Highland Park Schools, Hunterdon Central Regional High School, Jersey City Public Schools, Monroe Township Public Schools, Paterson Public Schools, Plainfield Public Schools, Westwood Regional School District, Woodbridge Township School District

DESCRIPTION

The New Jersey Center for Character Education (NJCCE) has been established by the New Jersey Department of Education through a grant from the US Department of Education to provide guidance, leadership and support for public and nonpublic educators developing and implementing character education programs. The Center provides statewide and regional conferences annually, facilitates the work of ten demonstration project school districts, and supports an information dissemination and collegial response forum, the New Jersey Character Education Network. The Center also provides technical assistance regarding program design and evaluation to school districts in association with the state's Character Education Partnership program of state aid for all school districts.

The NJCCE assists public and non-public school districts in integrating core ethical values, such as respect, responsibility and civic involvement into curriculum and school life by providing high quality conferencing, networking, professional development opportunities and electronic communications. The NJCCE also provides technical assistance regarding program development, implementation and evaluation of character education and social/emotional learning programs.

A Digital Archive of New Jersey History

Rutgers, The State University of New Jersey Libraries

NJ Higher Education Sector: Public Research University

Year Began: 1997 Participants Served: Teachers from nine school districts have developed modules with lesson plans since 1997.

CONTACT INFORMATION

William Fernekes, Ed. D., Supervisor of Social Studies
Hunterdon Central Regional High School
84 Route 31, Flemington, NJ 08822
Telephone: 908.284.7147
Fax: 908.284.7173
Email: wfernekes@hcrhs.k12.nj.us
Web Site: <http://www.scc.rutgers.edu/njh/>

Partners: Rutgers University Libraries, Hunterdon Central Regional HS, East Brunswick Public Schools, Freehold Regional Public Schools, Flemington-Raritan Regional Public Schools, Bridgewater-Raritan Regional Schools

DESCRIPTION

The Electronic New Jersey project is designed for secondary, middle, and elementary school teachers to develop web-based curriculum modules using primary source material to provide students with an in-depth study of New Jersey history. The eight topical modules currently available were chosen after careful review of a range of sources available in the Special Collections and University Archives of the Rutgers University Libraries, Rutgers University-New Brunswick. Instructional activities accompany the digital sources located in each topical module. Jersey Homesteads and Social Protest in the 1960s and 1970s were piloted by students and faculty at Hunterdon Central Regional HS and Spotswood HS in 1997. In 1998-99, modules were added on the Civil War and NJ, Paul Robeson and Rutgers, New Jersey and the American Revolution, and World War II in NJ. In 2001-02, new modules on the History of Science and Technology and Mass Culture and Consumerism were developed, field-tested and mounted on the site. During summer 2003, 5 new modules were developed: Thomas Edison and the Research Process, Women's Suffrage in NJ, The Cold War and Academic Freedom, WW II and NJ Industry, and NJ and the Civil War: The Life of A Soldier. These new modules will be field-tested and revised by May 2004, with mounting on this site scheduled for winter 2005. This program provides the opportunity for faculty to engage in research and curriculum development through the use of technology.

Curriculum Development

Newark Public Schools Systemic Initiative in Mathematics - Local Systemic Change Project

Rutgers, The State University of New Jersey - Newark
NJ Higher Education Sector: Public Research University
Year Began: 2002

CONTACT INFORMATION

Rutgers Director-Roberta Schorr, Associate Professor
Rutgers University-Newark
Bradley Hall, Newark NJ 07102
Telephone: 973.353.3525
Fax: 973.353.1622
Email: schorr@rci.rutgers.edu
Partners: Newark Public Schools, Montclair University

DESCRIPTION

The K-8 Newark Public Schools Systemic Initiative In Mathematics (NPSSIM) is an ambitious five-year plan to achieve comprehensive reform in mathematics education and to ensure institutionalization thereafter. Building on the existing infrastructure, pilot programs, partnerships, and lessons learned from past endeavors, research, and during the planning period, the project sets important goals that will result in improved student achievement in mathematics. The goals will be accomplished through a multi-faceted program that has at its core an informed cadre of instructional leaders at all levels within the school district, who will support the implementation of the adopted standards-based curricula, standards-based instruction, and assessment. These mathematics leaders will provide onsite, and ongoing support to help all teachers build new standards-based approaches to the teaching and learning of mathematics. The district has made a commitment to supporting change, and the time is ideal for this initiative which will not only help teachers and administrators who are currently part of the district, but provide a way to continue to support participants in transition as well as those who are new to the district. The implementation process includes scaling-up and expanding the internal capacity building of the Newark Public Schools in collaboration with community agencies and university partners to: implement standards-based curriculum; integrate the technology standards into mathematics instruction; develop and implement coherent assessment practices; provide ongoing standards-based professional development; and, use the results of research and data as a tool for improving mathematics instruction. Our ultimate goal is to improve student learning and every aspect of this proposal is intended to lead to that result.

Marion Thomas Charter School and UMDNJ-SN Health Education Project for Students, Teachers and Families

University of Medicine and Dentistry of New Jersey
NJ Higher Education Sector: Public Research University
Year Began: 1999 Participants Served: 300 students and 15 teachers

CONTACT INFORMATION

Delores Thompson, Chief School Administrator/Executive Director
Marion P. Thomas Charter School
17 Muhammad Ali Avenue, Newark, NJ 07108
Telephone: 973.621.0060
Fax: 9736210061
Partners: Marion P. Thomas Charter School, UMDNJ-School of Nursing

DESCRIPTION

The UMDNJ School of Nursing has partnered with the Marion P. Thomas Charter School since its conception, developing and implementing health care curriculum that meets the unique needs within this urban environment. As the school expands to the 7th grade, we are expecting the health care curriculum to deal with many complicated issues of pre-adolescence. Our RN/BSN students focus on professional development, staff health promotion, and increasing parent leadership in school as well. In addition, our students support and supplement the role of the school nurse as part of their clinical experience.

Curriculum Development

SUC2ES2 - Students Understanding Critical Connections Between the Environment, Society and Self

University of Medicine and Dentistry of New Jersey - School of Public Health

NJ Higher Education Sector: Public Research University

Year Began: 2000

Participants Served: 87 adults 1870 students

CONTACT INFORMATION

Laura Hemminger, Director, Resource Center

University of Medicine and Dentistry of New Jersey - School of Public Health

170 Frelinghuysen Road, EOSHI - Room 236G, Piscataway, NJ 08854

Telephone: 732.445.0351

Fax: 732.445.0122

Email: lehemmin@eohsi.rutgers.edu

Web Site: <http://www.eohsi.rutgers.edu/rc>

Partners: Environmental and Occupational Health Sciences Institute, University of Medicine and Dentistry of NJ - School of Public Health, Woodbridge Township School District, NJ State Department of Education, Rutgers Graduate School of Education

DESCRIPTION

SUC2ES2 represents a seven-year partnership between the Woodbridge Township School District , the Environmental and Occupational Health Sciences Institute and the University of Medicine and Dentistry of NJ School of Public Health, in collaboration with the NJ State Department of Education and the Rutgers Graduate School of Education. Curriculum guides are being developed for second, fifth, and seventh-graders in the district that incorporate environmental health themes as methods for improving academic performance. The integrative materials address NJ core curriculum content standards. The award-winning ToxRAPtm (Toxicology, Risk Assessment and Pollution) curriculum serves as the foundation for creating the new guides. ToxRAPtm enables youth to understand basic environmental health sciences concepts and to make informed decisions to reduce their health risks. As of September 2004, the second-grade module has been implemented district-wide; fifth-grade is being implemented in half of the district's elementary schools; and the seventh-grade module is being pilot-tested. Curriculum development, teacher training, and student assessment projects are coordinated throughout the academic year and during the summer.
